

Low-cost, long-cycle life space commercial off-the-shelf batteries

Primary Lithium-Ion Cells

Features and Benefits

- Cell agnostic (18650)
- Baseline configurations of two variations
- Long operating life of 5-15 years
- Cell type (18650) tailored to mission type
- Simple balancing electronics
- Current sense with amplifier
- Voltage and temperature telemetry
- Optional battery heaters
- Optional output disconnects
- Leverages ORION battery heritage design

Specifications

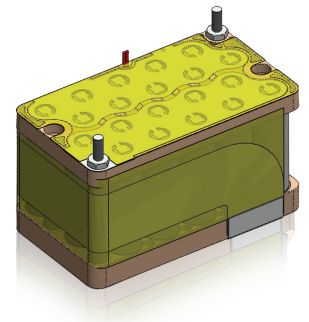
Nominal Voltage	28.0 V
Maximum Voltage	33.6 V
Minimum Voltage	24.0 V
Max Discharge Current	60 A
Operating Temperature	-10 to 45°C (14 to 113°F)

Applications

- Low-earth orbit satellite missions
- Geosynchronous-earth satellite missions
- Deep space exploration
- CubeSat and small satellites

Model	Capacity (Battery AT)	Variation	Cell Type*	Weight lbs (kg)**	Length in. (mm)	Width in. (mm)	Height in. (mm)
SAR-10237	27.0 Ah	10P8S	Power	12.68 (5.75)	10.66 (271)	6.80 (173)	3.54 (90)
SAR-10243	31.5 Ah		Energy				
SAR-10239	32.4 Ah	12P8S	Power	14.88 (6.75)	12.06 (306)	6.80 (173)	3.54 (90)
SAR-10245	37.8 Ah		Energy				

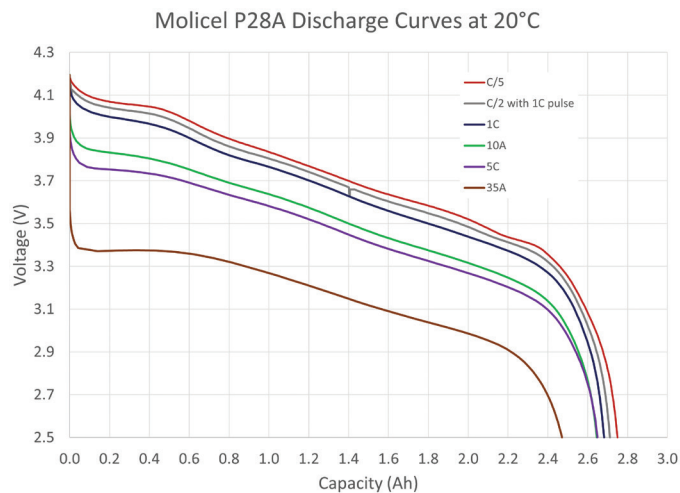
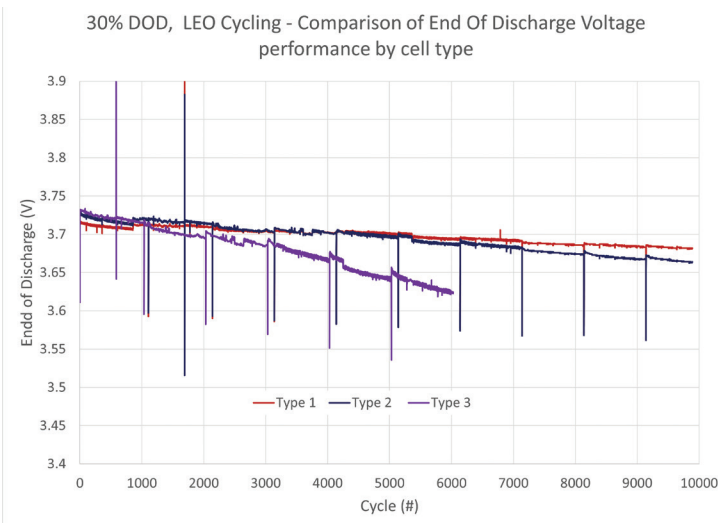
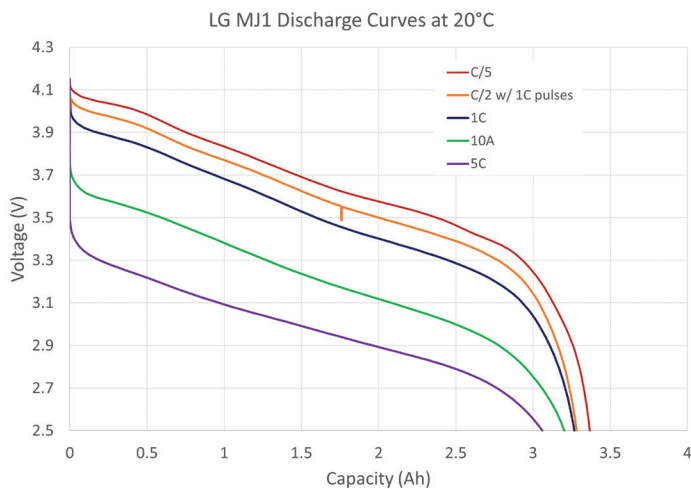
* Battery cells selected by best fit for the mission requirements
 ** Battery weight can vary slightly based on cell type



Concept Design - Product Under Development

Cell Selection

- Targets specific missions
- Cell evaluated through initial characterizations, accelerated life cycles and mission specific testing
- Battery-life predicted through modeling of test data and validated through continued testing



Concept Design - Product Under Development